



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NEW FARM CROPS FOR THE SOUTH

By S. M. TRACY,

United States Department of Agriculture, Washington, D. C.

Almost from its first settlement the South has been a "one-crop" country, and the cotton field was the sole reliance of the planter who knew very nearly how many bales would be made each season and just what labor could be depended upon from year to year. Now, however, the planters are confronted with a very serious problem in deciding what can be done to meet the changed conditions brought about by the advent of the cotton boll weevil and the consequent demoralization of the labor force. The old days when cotton was practically the only crop are gone forever, but new crops and new methods are being adopted with little loss or friction. While cotton will doubtless remain the staple crop of the South, and will continue to be a profitable crop under intelligent management, it will no longer be the only crop, and others are proving fully as remunerative.

The boll weevil has spread over about half of the cotton growing region. It is now sixteen years since it first attracted serious attention in Texas, but that state has now practically recovered from what seemed a fatal disaster; Louisiana has had them a shorter time but has accommodated herself to the change so readily that the present year has been one of the most profitable in her history. About one-half of Mississippi is infested, but the planters there have had such ample warning that they are well prepared for the change. In states farther east cotton is still the main crop and extremely profitable, but the planters in that section are fully aware of the fact that the weevil will soon reach them and are branching out into new lines of work.

Among the new interests which have proven most profitable in all parts of the South are hay, corn, and the raising of live stock, and of these hay-growing is of first importance. Twenty years ago the growing of hay for sale was almost unknown in the Gulf States, as it was generally believed that good hay, or hay in sufficient quantity to make it profitable, could not be grown there. At that

time the average yield through the South was less than one ton per acre, and it had no standing in the markets. In fact, little was saved excepting a partial supply for use on the farm. The southern planter was brought up to believe that the timothy and red clover of the North were the only plants from which really good hay could be made, but now he has learned better and knows that timothy is no better than Bermuda, and that he can not only grow red clover equal to any, but he can also grow lespedeza, cow peas, alfalfa and other crops which are fully the equal of the northern red clover. In fact, they are really better, being richer in protein, the most valuable element in any feed. This was fully shown some years ago in a very complete discussion of the matter, published in the "Experiment Station Record."

Iowa is the greatest hay-producing state in the Union, and Mississippi is fairly typical of the agricultural South. During the last ten years, according to statistics published by the United States Department of Agriculture, the average yield in Iowa has averaged 1.58 tons per acre against 1.62 tons in Mississippi; the average value of this hay on the farm in Iowa has been \$5.45 against \$10.09 in Mississippi, and the average value per acre in Iowa \$8.61 against \$16.35 in Mississippi. That is, the yield is about three per cent greater in Mississippi than in Iowa, while the value per ton and per acre is nearly ninety per cent greater. These figures speak for themselves. The varieties of hay which can be grown in the South are so many as to afford a wide range of choice. Within the last month the writer has seen bales of red clover, alfalfa, cow peas, vetches, soy beans, lespedeza, Spanish peanuts, melilotus, sorghum, oats, Bermuda, crabgrass, and Johnson grass hays on the market, and to those might have been added several more, rice, Dallis grass and others which are often used. Seven of those given in the list above are annuals which are planted in the fall after other crops have been harvested from the same ground, or are planted in the spring and are gathered in time to leave the land free for fall sowing, thus making the hay a "catch crop" which does not interfere with the grain and other crops.

We have always looked upon the extreme western states as being the only alfalfa region in the country, but during the last ten years it has been found that many sections in the South are equally well adapted to its growth, and those who were so fortunate as to

make this discovery a few years ago and who are in a favorable locality, are finding that crop more profitable than was cotton in its most palmy days. The principal alfalfa regions in the South are in the Rio Grande and Red River regions of Texas, and the "black prairie" region of northern Mississippi and northwestern Alabama, though it is grown more or less successfully on the alluvial lands along the Mississippi and other rivers. Texas growers make from six to eight tons per acre and find a ready sale for all they can produce at from ten to twelve dollars per ton. Mississippi and Alabama growers make smaller yields, from four to six tons, and find equally ready sale at from sixteen to eighteen dollars per ton. With such yields and such prices the alfalfa growers are literally "in clover."

Corn is another crop which is yielding high profits in the South. There is no obstacle in either soil or climate to prevent it from competing with the so-called "corn belt" of the North, and it is doing so successfully. The latent possibilities of the South as a corn producing region have been evident many years, though the general development of the industry is comparatively recent. More than twenty years ago South Carolina produced what was then the record crop, 236 bushels of shelled grain per acre, and the census report for 1880 gave Issaquena County, Mississippi, as making the second largest yield per acre of any county in the United States. Cotton was then a sure crop, bringing good prices and little attention was given to the figures. In the last few years, however, since planters have been forced to look to crops other than cotton, the growing of corn has received more attention and has been found extremely profitable. During the last month yields of 246 and 254 bushels per acre have been reported from South Carolina, and in all parts of the South yields of 100 bushels or more have been so common as to attract little attention. The 1909 crop in Louisiana showed an increase of more than 30 per cent over that of any previous year, and other southern states show a marked increase, though not so large because the weevil has not reached the part of the country farther east.

It is true that the corn weevil is often very destructive to southern corn in the crib, but as its injuries can be wholly prevented at a cost of less than one cent per bushel by the use of carbon bisulfide, that loss is more than compensated by the advantage of being able to place thoroughly matured and dry grain on the

market at a much earlier season than is possible from other sections. The average yields heretofore reported from the southern states have been smaller than those from some other sections, but that has been owing wholly to the fact that corn has been regarded as a crop of minor importance, usually being planted at any convenient season on lands too poor for cotton, and its cultivation neglected whenever there was other work to be done. Strange to say, the demonstration of the possibilities of corn in the South is due, not to the planters who were most vitally interested, but to the schoolboys who have formed "Boys' Corn Clubs" in nearly every county in the whole South. It is only about five years since this movement started, but it seems to have swept the whole southern country and has won the respect and support of all progressive planters. County boards have made appropriations for prizes, and the local papers have made special efforts to secure detailed statements of just how each prize crop was grown. Corn has always commanded a high price in the South, rarely bringing as little as seventy-five cents per bushel, and more often a dollar, and now that the boys have shown how intelligent work will produce such yields the business is increasing rapidly. The southern planter has discovered that the same amount of care and skill and labor will make as much corn in Carolina or Mississippi as in Illinois or Nebraska, and is changing his crops accordingly. It was formerly regarded as an unimportant "feed crop" but has now become a staple and profitable "money crop."

The raising of live stock of all kinds is proving very profitable on account of the small cost for food and shelter. Southern pastures contain an unusually large proportion of leguminous plants, the plants which give the richest feed for growing and fattening animals, the grazing season is long, from nine to twelve months, and the climate makes expensive barns unnecessary for protection. The principal cost in growing an animal is for its food, and the cheapest food for any animal is that which it gets by grazing. In the extreme South thousands of animals which have never seen a grain of corn or the inside of a barn are marketed annually, and even as far north as the Ohio River the feeding season is very short.

The mule is the work animal of the South, but, until recently, planters have depended on the northern markets for their supply. A few progressive men, however, are now raising not only what are

needed on their own plantations but a considerable number for sale. They find that with their abundant pastures and long grazing season a mule can be raised at about the same expense as a steer, many claiming that the total outlay for feed and care does not exceed two dollars per month, while the mule at three years old commands a better price than one of the same size and weight imported from Missouri or Ohio.

Cattle raising always gave a fair profit when the native "scrubs" were used, but the better pure-breds have proven so much more profitable that the native stock is rapidly disappearing. This is specially true on the immense Texas ranches, where there are to-day more registered animals than in any other state in the whole Union, and not only is the number greater but the proportion is still greater. From ten to fifteen years ago Texas was the best market for surplus breeding stock from the North, but is now the region from which the Northwest buys its pure bred breeding stock. The opportunities for profitable dairying are countless. Good feed for cows is easily and cheaply grown, and the market for milk and butter practically unlimited. Cows thrive and yield as well here as anywhere, while the usual price of milk is forty cents per gallon, and it finds a ready sale at that price. There is scarcely a town in the South where a dairyman cannot make a fortune.

The South is just beginning to grow its own pork, and finds that it can be grown here cheaper than anywhere else in the world. In this section good pork can be made without one cent of expense except for the planting and cultivating of the feed crops which the hogs harvest for themselves, and a few of our planters are now packing thousands of pounds of pork annually from hogs grown in that way. The most important point in making pork at a low cost is in having feed crops which mature in succession and so give the hogs constant grazing, and the possibility of doing this gives the South a great advantage. There are a dozen or more crops which are almost ideal for that purpose, among which are the following:

January and February—wheat, oats and vetch, artichokes, rape; March—oats and vetch, artichokes, rape; April—oats and vetch, alfalfa, red clover; May—oats and vetch, alfalfa, red clover; June—sorghum, cow peas, alfalfa, red clover; July—sorghum, cow peas, alfalfa, red clover; August—sorghum, cow peas, soy beans, alfalfa; September—sorghum, cow peas, soy beans, chufas, sweet

potatoes; October—sorghum, cow peas, soy beans, chufas, sweet potatoes, corn; November—cow peas, chufas, sweet potatoes, peanuts, corn, rape; December—cow peas, chufas, sweet potatoes, peanuts, corn, rape.

With such a large variety of plants, some of which will furnish grazing at all times, it is not difficult to make a selection for any locality which will give continuous pasturage through the entire year, and which will furnish a large proportion of the feed for the hog at an almost nominal cost. By arranging a proper rotation much of the ground can be made to produce two or three crops annually, and as all will be consumed in the field, succeeding crops can be grown with the use of little or no fertilizer. Of course the best succession of crops for different soils and localities varies greatly, and no one definite plan can be followed everywhere. In some localities crimson clover is used in place of the vetch, and on the light, sandy soils of the extreme southern section cassava takes the place of artichokes. These figures and statements are not mere paper possibilities, but are based on what has actually been done in localities which possessed no special advantages. Hon. W. L. Foster, of Shreveport, La., writes that he packs annually 30,000 to 40,000 pounds of pork for use on his own plantation, and that it costs him little more than two cents per pound in the barrel. Prof. J. W. Fox, of the Greenville, Miss., experiment station, has recently published a report describing how he grew something over 20,000 pounds of pork last year, which cost him \$579.50 and which he sold for \$1,382.51, giving him a net profit of \$803.01. In the cost of this pork he includes a charge of \$354.50 for corn which was gathered by the hogs themselves, but was charged to them at an average rate of 67½ cents per bushel. Prof. Duggar, of the Alabama station, Dr. Redding, of Georgia, and Col. Newman, of South Carolina, give almost the same figures.

Sheep flourish in all the "piney woods" region, where they are remarkably free from all diseases. Most of these sheep range in the open woods during the entire year and receive no feed or attention of any kind except an annual shearing and marking. Of course the yield of wool is light, but it brings a fancy price on the Boston market, and as the animals cost nothing for their keep they are quite profitable. Recently a number of owners have introduced rams of the mutton breeds and are finding the production of spring lambs

even more profitable than the growing of wool. With the mild climate it is possible to secure lambs so early in the season that they are ready for the northern markets several weeks before they can be shipped from the western farms. Within the next decade a good part of the "hot-house" lambs for the Washington and New York markets will be range lambs from the gulf coast.

The southern planter has come to realize the importance of good seeds, and there is an excellent chance for a few men to make good money growing them in every community. Seed breeding is an almost unknown business in the South, and thousands of dollars are sent out of the country annually for the purchase of seeds which are not as well suited to our soils and climate as are those which are grown here. The best corn and the best cotton for any locality is a variety which has been bred and developed in that locality. The few men who are now engaged in that business are finding ready sale for all their products, and there is abundant room for at least one such man in every county. This is one of the very best business opportunities for men who have had college training and who know the principles of correct breeding and selecting. The writer knows four such men who have been growing seed corn a few years, and not one of them has ever had sufficient seed to supply the demand at two dollars per bushel. There are equally good opportunities in the breeding of cotton, oats, rice and other crops. The average planter is not a seed breeder, but he knows the worth of good seed and is ready to pay a good price for it.

Many other profitable new crops might be mentioned. During the last year the growing of rice was attempted in Mississippi and Arkansas, yields of over ninety bushels per acre being secured. Oranges and figs have been found extremely profitable from southern Mississippi westward to southern Texas. As fast as the railroads reach new sections new market gardening areas are developed and shipments become more profitable. The agricultural development of the South has only just begun, but the "Wall Street Journal" says:

"We have become so accustomed to associating agricultural prosperity with other sections of the country that it is something of a surprise to learn that in the past year the twelve southern states produced over \$1,429,000,000 worth of agricultural products, as against \$705,000,000 in 1899, an increase of more than 100 per cent, while the average increase of the other sections was a little less than 65 per cent."

The coming of the boll weevil has broken up the old system of agriculture, but a better system is being developed. New crops are being grown, new methods of cultivation are being adopted, and the next ten years will see the South in a better financial condition than at any time since the war.